

## **AMENDMENTS TO THE CLAIMS:**

Please cancel claims 14-18 without prejudice. Please amend claims 1, 5, 11, and 13. Pursuant to 37 C.F.R. § 1.121, as revised, a detailed listing of all claims that are, or were, in the application, is listed below, with the current status of all claims indicated in parentheses after the claim number. Deleted matter is shown by strikethrough and added matter is shown by underlining.

### **Detailed Listing of All Claims:**

1. (Currently Amended) A selective hydrogenation catalyst comprising:  
  
an inorganic oxide support selected from the group consisting of alumina, titania, and a chemical composite of alumina and titania;  
  
a major active component ~~Pd~~ palladium of a content of about 0.002-1.0% based on the total weight of the catalyst; and  
  
at least one promoter selected from Group IB metals, the mole ratio of palladium to the Group IB metal ~~being~~ is in the range of about 1 to about 20;  
  
wherein the major component palladium and the promoter are uniformly distributed together in the catalyst body within the thickness between the support surface and the depth of more than about 300  $\mu\text{m}$ .
2. (Original) The catalyst according to claim 1, wherein the content of alumina in the chemical composite of alumina is about 1-99% by weight.
3. (Original) The catalyst according to claim 2, wherein the content of alumina is about 20-80% by weight.
4. (Original) The catalyst according to claim 3, wherein the content of alumina is about 40-60% by weight.
5. (Currently Amended) The catalyst ~~support~~ according to claim 4, wherein the support comprising comprises the following physical properties: bulk density of about 0.7-0.9 g/ml, pore volume of about 0.3-0.6 ml/g, specific surface area of about 10-60  $\text{m}^2/\text{g}$ , mean pore diameter of about 40-100 nm.

6. (Original) The catalyst according to claim 1, wherein the content of the major active component-palladium is about 0.005-0.5 wt%.

7. (Original) The catalyst according to claim 6, wherein the content of the major active component-palladium is about 0.01-0.05 wt%.

8. (Original) The catalyst according to claim 1, wherein the promoter is selected from the group consisting of Cu, Ag, and Au.

9. (Original) The catalyst according to claim 1, wherein the mole ratio of palladium to the Group IB metal is in the range of about 1-10.

10. (Original) The catalyst according to claim 9, wherein the mole ratio of palladium to the Group IB metal is in the range of about 1.0-5.0.

11. (Currently Amended) The catalyst according to claim 1, wherein the active component, palladium and the promoter, Group IB metal existing in the form of oxides in the support are reduced to fine alloy particles with a diameter of about 2-10 nm.

12. (Original) The catalyst according to claim 1, wherein the dispersion depth is within the thickness between the support surface and the depth of 500-1000  $\mu\text{m}$ .

13. (Currently Amended) The catalyst according to claim 1, further comprising alkali metals and/or ~~alkali~~ alkaline earth metals.

14-18. (Canceled)